REMARKS

Claims 15 to 22, 25 to 28, 30 to 42, 44, and 45 are pending in the present application. Claim 36 has been amended herein. No claims have been canceled, and no new claims have been added. Applicants respectfully request entry of the amendment because it removes issues for appeal. MPEP § 714.13.

Applicants acknowledge with appreciation the Examiner's indication that claims 30 to 35, 41, 42, 44, and 45 are allowable.

Applicants respectfully request reconsideration of the rejections of record in view of the following remarks.

I. The Specification Describes the Claimed Subject Matter

Claims 15 to 22 and 25 to 28 have been rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly does not convey to one skilled in the art that Applicants had possession of the claimed subject matter as of their June, 1993 priority date. In particular, the Office Action alleges that those skilled in the art would not understand the specification to describe an ablation layer that is both ablatable by infrared radiation and opaque to non-infrared actinic radiation. Applicants traverse the rejection because it is unsupported by any evidence as to how those skilled in the art would interpret Applicants' 1993 priority document and, in fact, is directly refuted by the evidence of record.

The attached declaration of Edward T. Murphy demonstrates that those skilled in the art, upon review of Applicants' 1993 priority document (and, in turn, similar disclosure in the instant specification) recognize that Applicants were in possession of the subject matter of claims 15 to 22 and 25 to 28 and, in particular, ablation layers that are ablatable by infrared radiation (Murphy Decl. ¶ 12). Those skilled in the art understand these documents to describe photosensitive elements that contain a layer that is ablatable by laser radiation, without any requirement that a particular wavelength of laser radiation, or range of wavelengths, be used (Murphy Decl. ¶ 11). The specification teaches that the wavelength of the laser used for ablation should be one that permits ablation without excessive damage to the photoplymer layer (Murphy Decl. ¶ 11). The specification, for example, repeatedly refers to ablation of the ablatable layer at a "selected wavelength" or at the "appropriate wavelength" (Murphy Decl. ¶ 11).

Although the specification does not require that ablation occur at any particular wavelength, the specification does teach that the use of IR lasers is preferred (Murphy Decl. ¶ 12). For example, Example 3 describes ablation of the ablation layer of a photosensitive element by a laser operating at a wavelength in the infrared region, *i.e.*, 10.6 μm, and describes tests conducted using a laser at other infrared wavelengths, *i.e.*, 1.06 μm (Murphy Decl. ¶ 12). Upon review of this and other disclosure in the instant specification, those skilled in the art recognize that Applicants' inventions involve the use of ablation layers that are ablatable by infrared radiation (*id.*).

This recognition would not have been altered by the teaching of Applicants' Example 3 relating to the use of YAG lasers. Although the Office Action correctly notes that the YAG laser in Example 3 was not effective in causing ablation under the particular operating conditions employed, this fact falls far short of establishing that Applicants were not in possession of the claimed inventions. Indeed, those skilled in the art would have readily understood that the absence of ablation resulted from operating the laser at the relatively low power level that was being tested in Example 3, and that this could easily be remedied by operating the laser at a higher power level (Murphy Decl. ¶ 12). Table II, for example, demonstrates that a CO_2 laser emitting in the infrared region was effective in causing ablation at some intensity levels, but was ineffective in causing ablation of the layers when operating at others (*id*). Those skilled in the art, therefore, would have understood that a YAG laser (also emitting in the infrared region) would be effective in causing ablation of the ablation layer if simply operated at, for example, a greater intensity level (*id.*). Accordingly, the mere fact that one of Applicants' experiments seeking to identify representative operating parameters did not provide optimal results does not support the conclusion that "a YAG laser at 1,060 nm (1.06 um [*sic*:μm]) did not work." (Office Action dated July 31, 2002, page 6).

The experiments described in Example 3 also do not support the conclusion that "the unpredictability of the chemical art of ablatable layers is demonstrated to the worker of ordinary skill in the art by applicants' disclosure." (Office Action dated July 31, 2002,

pages 7 and 11). The fact that lasers emitting infrared radiation are effective in causing ablation when operated at some intensity levels, but are less effective when operated at others, does not demonstrate that the art is unpredictable. Such results merely demonstrate that IR lasers are more or less effective in causing ablation depending upon the intensity level at which they are operated (Murphy Decl. ¶ 12). Those of skill in the art could readily predict the intensity level at which an IR laser should be operated to cause ablation of a given ablatable layer based upon the Experiments described in Example 3. The Examiner's comments regarding the experiments described in the instant specification, therefore, fail to establish unpredictability in the art, and, moreover, the Examiner has not provided any credible evidence that the art is, in fact, unpredictable.

Although the Office Action states that "Applicants have not established that the original disclosure would lead a worker of ordinary skill in the art to realize ***only*** IR ablatable layers" (Office Action dated July 31, 2002, pages 7 and 11)(emphasis added), Applicants have not asserted that the specification describes ablation layers that are *only* ablatable by infrared radiation. Rather, Applicants have asserted that those of skill in the art understand the specification to describe photosensitive elements that contain a layer that is ablatable by laser radiation, without any requirement that a particular wavelength of laser radiation be used (Murphy Decl. ¶ 11). Applicants have further asserted that the specification teaches that the use of IR lasers is preferred.

The evidence of record also demonstrates that those skilled in the art, upon

review of the specification, would recognize that Applicants were in possession of an ablation layer that imparts opacity to non-infrared actinic radiation. As Mr. Murphy states in his declaration, those of skill in the art would recognize that the specification describes ablatable layers that provide opacity to the wavelength of light that is used to cure an accompanying photopolymerizable layer (Murphy Decl. ¶ 13). The specification, for example, states that "UV flood lamps normally provide the light for curing" (page 9, lines 33-34), and indicates that the presence of a UV absorber in the ablatable layer imparts UV opacity to the layer (Murphy Decl. ¶ 13). The specification further states that the spectral range of the flood-exposure lamps used "in *most* applications" is 300-400 nm, that the UV absorber "*typically* should be active in this range," and that an alternative way of stating this is to say that the UV absorber must have a high extinction coefficient "in the *spectral output range of the developer lamps*" (Murphy Decl. ¶ 13; page 10, lines 5 to 11, emphasis added).

As described in the specification, a "UV absorber," in turn, is a material that absorbs the radiation used during the curing process, imparting opacity to such radiation to the ablation layer (Murphy Decl. ¶ 13). Those skilled in the art would understand, therefore, that a material would be considered to be a "UV absorber" so long as the material absorbs UV light used to cure the photopolymerizable layer and imparts opacity to such light, whether or not it also happens to absorb IR radiation (Murphy Decl. ¶ 13). Those of skill in the art further understand that a material used as the UV absorber in the ablatable layer could be active in the IR range, and could absorb both UV and IR radiation (Murphy Decl. ¶ 13).

Because the evidence of record demonstrates that Applicants' specification contains adequate written description of the claimed subject matter (in particular, photosensitive elements comprising ablation layers that are ablatable by infrared radiation and opaque to non-infrared actinic radiation) Applicants request that the rejection under § 112, first paragraph, be withdrawn.

II. The Fan Patent Does Not Anticipate the Claims or Render Them Obvious

Claims 15 to 20 and 25 to 27 have been rejected under 35 U.S.C. § 102(e) as allegedly anticipated by, or, alternatively, under 35 U.S.C. § 103(a) as allegedly obvious over, U.S. Patent No. 6,238,837 (hereinafter "the Fan patent"). Applicants respectfully traverse the rejection because the claims are entitled to a filing date that is early enough that the Fan patent is not available as prior art.

The Office Action mistakenly suggests that support for claims 15 to 20 and 25 to 27 is not found in priority application number 08/082,689, filed June 25, 1993, and that the Fan patent is therefore somehow available as prior art against the claims. As discussed in Section I of this Response, however, the present specification provides ample support for claims 15 to 20 and 25 to 27. Since the supporting disclosure appears nearly verbatim in application number 08/082,689, the claims are entitled to the benefit of the June 25, 1993, filing date of that patent application. Because this date is more than twenty-two months before the earliest filing date to which the Fan patent purports to be entitled, the Fan patent is

not prior art against the present claims. Accordingly, the rejection for alleged anticipation or obviousness is improper, and should be withdrawn.

III. The Claims are Not Indefinite

A. Claims 36 to 39 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite with respect to their recitation of the phrase "the at least one binder is a polyamide" because antecedent basis for "binder" is supposedly unclear. Without conceding the correctness of the rejection, and to advance prosecution, claim 36 has been amended to delete the phrase "the at least one binder is a polyamide." The rejection has been obviated, and Applicants request withdrawal thereof.

B. Claim 40 has been rejected under 35 U.S.C. § 112, second paragraph, as indefinite, and, alternatively, has been rejected under 35 U.S.C. § 112, first paragraph for lack of written description, because it is allegedly unclear whether the UV absorber absorbs radiation having a wavelength of 10.6 μm. As previously discussed, the specification describes "UV absorbers" as materials that absorb the radiation used during the curing process, imparting opacity to such radiation to the ablation layer (Murphy Decl. ¶ 13). Those skilled in the art would understand, therefore, that a material would be considered to be a "UV absorber" so long as the material absorbs UV light used to cure the photopolymerizable layer and imparts opacity to such light, whether or not the material also happens to absorb IR radiation (Murphy Decl. ¶ 13). Those of skill in the art further understand that a material

used as the UV absorber in the ablatable layer could be active in the IR range, and could absorb both UV and IR radiation (Murphy Decl. ¶ 13). Accordingly, based upon the description provided in the specification, those of ordinary skill in the art understand the UV absorber to be a material that can absorb IR radiation (see pages 17 to 19 of the specification as filed). The rejection for idenfiniteness or lack of written description is, therefore, believed to be improper, and Applicants request withdrawal thereof.

Conclusion

Applicants submit that the claims are in condition for allowance. An early Office Action to that effect is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Respectfully submitted,

Date: **October 24, 2002**

Jane Inglese

Jane E. Inglese, Ph.D.
Registration No. 48,444

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claim 36 has been amended as follows.

36. (Amended) The process of claim 30 wherein said polymeric matrix includes a polyacetal, polyacrylic, polyamide, polyimide, polybutylene, polycarbonate, polyester, polyethylene, cellulosic polymer, polyphenylene ether, or polyethylene oxide[; the at least one binder is a polyamide].